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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,772	09/15/2003	Ronald P. Doyle	RSW920030174US1	2183

45541 7590 07/20/2009
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EXAMINER

WAI, ERIC CHARLES

ART UNIT	PAPER NUMBER
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2195

NOTIFICATION DATE	DELIVERY MODE
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07/20/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

Office Action Summary	Application No. 10/662,772	Applicant(s) DOYLE ET AL.	
	Examiner ERIC C. WAI	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7-11,15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-11,15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 7-11, 15, and 17 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms are not clearly understood:

- i. Claim 1 lines 5-9 recite, “the attributes comprising the demand for another service in the plurality of services and at least one of a resource of the system including: a software status of a software server, a cache state of the software server, a time period required to provision at least one of the resources”. It is unclear how a resource can include a software status, a cache state, and a time period. Furthermore it is unclear whether the attributes comprise the ‘at least one of a resource of the system’ or demand for the ‘at least one of a resource of the system’.
- ii. Claim 1 lines 9-10 recite, “wherein the resources comprise the software server, the image server, a network or a storage system, and a

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load on the image server". It is unclear how the resources can be comprised of a load.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7-11, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aziz et al. (US Pat No. 6,597,956).

6. Regarding claim 1, Aziz discloses a method of managing resources in a system, the method comprising:

determining a demand for a service in a plurality of services being provided using a plurality of software servers in the system, wherein the plurality of services share the resources of the system (col 5 lines 7-8, 13-17, wherein the computing grid is logically divided based on demand for services provided for that organization's virtual server farm; col 7 lines 55-54, wherein resources are shared);

determining attributes of the system on the image server, and at least one of a resource of the system (col 5 lines 13-17, wherein the allocation is performed based on

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real time demand and other factors), wherein the resource comprises: the image server, a network, or a storage system, and a load on the image server (col 5 lines 13-17); and provisioning resources for the service based on the demand and at least one of a resource of the system (col 5 lines 13-17, wherein the allocation of physical computer resources is performed).

7. Aziz does not teach the determining and provisioning occurs on the image server. Aziz does teach the use of a control plane used for supervisory purposes (col 5 lines 44-51). Aziz also teaches the loading of images onto computing elements (col 9 lines 1-11). Therefore, it would have been obvious to explicitly include a server in the system of Aziz to perform such functions. One would be motivated by the desire to have a means to perform the steps taught by Aziz.

8. Aziz does not explicitly teach the attributes comprising a demand for another service in the plurality of services. However, Aziz is directed towards the use of multiple virtual server farms that are simultaneously executed on a computing grid. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Aziz to also factor the demands on other virtual server farms (i.e. demand for other services). One would be motivated by the desire to take into account the demands of others since the resource pools are shared.

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9. Aziz does not teach that the resource comprise at least one software server, and wherein the at least one attribute comprises a software status of the at least one software server.

10. Aziz considers the services provided by various nodes in a network of computers. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a software server and its status. Therefore, one would be motivated by the desire to include software servers in the network of computers of Aziz.

11. Aziz does not teach that the attribute comprises a cache state of the at least one software server.

12. It would have been obvious to one of ordinary skill in the art at the time of the invention to include provisioning resources based on a cache state. One would be motivated by the desire for more efficient use of resources by reducing the necessity to replenish the cache with new data.

13. Aziz does not explicitly teach that the attribute comprises a time period required to provision at least one of the resources for the service.

14. It would have been obvious to one of ordinary skill in the art at the time of the invention to factor in a time period required to provision a resource into the cost of doing so. One would be motivated by the desire to increase profits and efficiency.

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15. Regarding claims 7-10, Aziz teaches the method as claimed in claim 1.

16. Regarding claim 11, and 15, they are the system claims of claim 1 above.

Therefore, they are rejected for the same reasons as claim 1.

17. Regarding claim 17, it is the program product claim of claims 1 above. Therefore, it is rejected for the same reasons as claim 1 above.

Response to Arguments

18. Applicant's arguments filed 03/31/2009 have been fully considered but they are not persuasive.

19. Applicant argues on pgs 6-7 of Remarks:

“The Office asserts that Aziz shows this feature by citing col. 5, lines 13-17 of Aziz. However, Aziz only teaches each VSF can change in terms of number of CPUs, storage capacity and disk and network bandwidth based on demand or other factors. These other factors are policy considerations (col. 11, lines 7-15). Never is there taught the provisioning of resources based on the demand and the other attributes. Aziz teaches that resources are allocated on demand or policy, not attributes.”

20. Examiner disagrees. Contrary to Applicant's assertions, Aziz does not explicitly state that the other factors are policy considerations. The cited portion states that policy-

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based rules can sometimes be utilized in the allocation of resources. Aziz does that the provisioning of resources is based on attributes (col 7 lines 55-64, wherein failures are dealt with (i.e. status of a server), mitigating bursty traffic and peak processing loads).

21. Applicant argues on pg 7 of Remarks:

“Moreover, the present invention is specific to provisioning resources on an image server. The Office alleges that it would be obvious to utilize the system of Aziz to perform such functions. However, Aziz teaches that "No computing element is dedicated to any particular role or task." (col. 9. lines 5-6). In the present invention, software servers are dedicated to a particular task and this attribute is a factor in allocating the resource (paragraph [0027]). Thus, if one used Aziz as the Office suggests, one would have to disregard the teaching that no computing element is dedicated to a particular task. One cannot violate the teachings of a reference to present an obviousness rejection and therefore this rejection should be withdrawn.”

22. Examiner disagrees. Amended claim 1 only recites that the determination steps are performed on the image server. However, the claims are silent as to where the provisioning of resources is performed. Claim 7, recites that the provisioning of resources is performed using the image server and not on the image server as argued by Applicant. Furthermore, Aziz clearly teaches the use of control plane to perform the supervisory functions (col 5 lines 44-55). The computing elements that implement the control plane are dedicated to a particular task. Therefore, there is no violation of the teachings of Aziz.

23. Applicant argues on pg 7 of Remarks:

“These attributes all regard a computing element dedicated to a particular task.

So, as noted above, this is contrary to the teaching of Aziz. Therefore, the Office is disregarding a specific teaching of Aziz and this is impermissible.”

24. Examiner disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *attributes all regard a computing element dedicated to a particular task*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012.

The examiner can normally be reached on Mon-Thurs, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Eric C Wai/
Examiner, Art Unit 2195